2026-2027 Placement Options

2025-2026 Summer Scholars Only			
PI	**Affiliation**	**City**	**State**
Amelia Anderson	Cyclarity	Novato	California
Kelsey Moody	Ichor Life Sciences, Inc.	Syracuse	New York
2025-2026 Post-baccalaureate Scholars Only			
PI	**Affiliation**	**City**	**State**
Amutha Boominathan	Lifespan Research Institute	Mountain View	California
Amit Sharma	Lifespan Research Institute	Mountain View	California
Amelia Anderson	Cyclarity	Novato	California
Kelsey Moody	Ichor Life Sciences, Inc.	Syracuse	New York

Students who are selected for interviews based on their application will be contacted to rank their interest in the host lab placements. At this time, they will be able to express locational restrictions. Some labs may take on multiple students.

Lifespan Research Institute

Amutha Boominathan
Lifespan Research Institute
Mountain View, CA

Research in the Boominathan lab encompasses a multifaceted approach to combating mitochondrial dysfunction by targeting both the quality control and genetic integrity of mitochondria.

One major focus involves identifying small molecules that enhance mitophagy in models of mtDNA mutations, with the goal of promoting the selective removal of damaged mitochondria.

Another project explores the potential to manipulate mitochondrial DNA content in vitro using engineered exosomes and vesicles, aiming to correct mtDNA imbalances associated with mutations or age-related decline.

Complementing these efforts, Amutha's team is advancing gene therapy strategies to express the 13 protein-coding mitochondrial DNA genes from the nucleus via allotopic expression, building on successful validation in patient-derived cybrid cell lines and in vivo models.

Collectively, these projects aim to restore mitochondrial health and functionality through innovative genetic and pharmacological strategies.

Additional information: https://www.lifespan.io/our-research/boominathan-lab

Lifespan Research Institute

Amit Sharma
Lifespan Research Institute
Mountain View, CA

A variety of physiological and pathological stimuli elicit the cellular senescence response. Immune cells are known to execute surveillance of infected, cancerous, and senescent cells, and yet senescent cells accumulate with age and drive inflammation and age-related disease. Understanding the roles of different immune cells in senescent cell surveillance could enable the development of immunotherapies against biological aging and age-related disease.

In this project, you will work with human and mouse immune cells to leverage them as an immunotherapy against senescent cells. You will learn multi-color flow cytometry, co-culture assays and be involved in multi-omic data analysis.

Additional Information: https://www.lifespan.io/our-research/sharma-lab

CYCLARITY
THERAPEUTICS

Amelia Anderson
Cyclarity Therapeutics
Novato, CA

Cyclarity Therapeutics, a clinical stage startup company located at the Buck Institute, is looking for a motivated student to join our team. Cyclarity is engineering drugs based on cyclodextrins that can bind and reverse the pathological effects of certain oxidized forms of cholesterol implicated in atherosclerosis and several other diseases of aging.

The laboratory techniques involved include growing macrophages; flow cytometry to characterize macrophages in various states of differentiation, polarization, and disease; semi-automated (robotic liquid handler) biochemical binding and toxicity assays; ELISA; and other common molecular biology and biochemistry techniques.

The choice of a specific project will depend on the skillset and preferences of the trainee. Interested applicants do not need to know all the techniques required to run these assays, but should be familiar with routine lab protocols and should not be uncomfortable working with human or animal blood and tissues.

Cyclarity also specializes in in silico molecular modeling of cyclodextrins, so the student may choose to focus on performing molecular dynamics simulations to characterize cyclodextrin host-guest complexes. If promising hits are identified from computational experiments, they may be synthesized and tested in the lab.

Additional Information: https://cyclaritytx.com/our-science/

Kelsey Moody
Ichor Life Sciences, Inc.,
Syracuse, NY

We are dedicated to changing the world because we believe we can.

We build change and drive innovation by ushering clients through preclinical discovery and pharmacology phases, and by continuously publishing our own innovative research in high-impact journals.

We are on a mission to help researchers spark the next generation of pharmaceuticals. We do this by driving profound protein discovery, developing robust pharmaceutical datasets, and consulting with clients to ensure lucrative outcomes.

Various positions available in protein engineering, cell-based drug screening, and in vivo testing.

Additional Information: https://ichorlifesciences.com